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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/710,817	08/05/2004	Yi-Shou Hsu	REAP0059USA	4816

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EXAMINER	
VUONG, QUOCHIEN B	
ART UNIT	PAPER NUMBER
2618	

NOTIFICATION DATE	DELIVERY MODE
07/17/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/710,817	HSU, YI-SHOU	
	Examiner	Art Unit	
	Quochien B. Vuong	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 August 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *05 August 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 08/05/2004 and 08/25/2004 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements are being considered by the examiner.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 13-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 13-20 recite the limitation "**the distribution of the at least one in-use channel**", and "**the at least one reference value**" in claim 13, lines 6 and 9, respectively. There is insufficient antecedent basis for this limitation in the claim.

Claim 14 recites the limitation "the status of each channel" in claim 14, line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Leonard (US 3,806,819).

Regarding claim 1, Leonard discloses a method for selecting one channel from a plurality of channels in a wireless network system, the channels including at least one in-use channel, a first idle channel, and a second idle channel, the method comprising: determining a first reference value for the first idle channel and a second reference value for the second idle channel by comparing the frequency band of the in-use channel with the frequency band of the first idle channel and the frequency band of the second idle channel (column 1, lines 35-55, discloses that among the free channels (idle channels) some are pure free channel (i.e., not adjacent to the busy channel) and some are not-pure free channel (i.e., adjacent to busy channel); the reference value is either pure free or not –pure free channel); and comparing the first reference value with the second reference value to select one from the first idle channel and the second idle channel (column 1, line 35 – column 2, line 47).

As to claim 2, Leonard discloses detecting the channels to identify the in-use channel, the first idle channel, and the second idle channel (column 1, lines 30-34).

As to claim 3, Leonard discloses wherein if the frequency band interval between the in-use channel and the first idle channel (adjacent to busy channel/not-pure free channel) is shorter than that between the in-use channel and the second idle channel (pure free channel), the first reference value is larger than the second reference value (column 1, line 35 – column 2, line 47).

As to claim 4, Leonard discloses wherein the channel selected from the first idle channel and the second idle channel is the one having a smaller reference value (column 1, line 35 – column 2, line 47).

As to claim 5, Leonard discloses wherein if the frequency band interval between the in-use channel and the first idle channel (adjacent to busy channel/not-pure free channel) is shorter than the frequency band interval between the in-use channel and the second idle channel (pure free channel), the first reference value is smaller than the second reference value (column 1, line 35 – column 2, line 47).

As to claim 6, Leonard discloses wherein the channel selected from the first idle channel and the second idle channel is the one having a larger reference value (column 1, line 35 – column 2, line 47).

Regarding claim 7, Leonard discloses a method used in a wireless network system, the method comprising: detecting the status of a plurality of channels in the wireless network system to divide the channels into at least one in-use channel, a first idle channel, and a second idle channel (column 1, lines 30-34); and comparing the frequency band of the in-use channel with the frequency band of the first idle channel and the second idle channel to determine a first reference value for the first idle channel

and a second reference value for the second idle channel (column 1, line 35 – column 2, line 47, discloses that among the free channels (idle channels) some are pure free channel (i.e., not adjacent to the busy channel) and some are not-pure free channel (i.e., adjacent to busy channel); the reference value is either pure free or not –pure free channel).

As to claim 8, Leonard discloses comparing the first reference value with the second reference value to select one from the first idle channel and the second idle channel value (column 1, line 35 – column 2, line 47).

As to claim 9, Leonard discloses wherein if the frequency band interval between the in-use channel and the first idle channel (adjacent to busy channel/not-pure free channel) is shorter than that between the in-use channel and the second idle channel (pure free channel), the first reference value is larger than the second reference value (column 1, line 35 – column 2, line 47).

As to claim 10, Leonard discloses wherein the channel selected from the first idle channel and the second idle channel is the one having a smaller reference value (column 1, line 35 – column 2, line 47).

As to claim 11, Leonard discloses wherein if the frequency band interval between the in-use channel and the first idle channel (adjacent to busy channel/not-pure free channel) is shorter than the frequency band interval between the in-use channel and the second idle channel (pure free channel), the first reference value is smaller than the second reference value (column 1, line 35 – column 2, line 47).

As to claim 12, Leonard discloses wherein the channel selected from the first idle channel and the second idle channel is the one having a larger reference value (column 1, line 35 – column 2, line 47).

Regarding claim 13, Leonard discloses a method for selecting a channel from a plurality of channels in a wireless network system, the channels comprising at least one in-use channel and at least one idle channel (column 1, lines 30-34), the method comprising: determining a reference value for each idle channel according to the distribution of the at least one in-use channel among the channels (column 1, lines 35-55, discloses that among the free channels (idle channels) some are pure free channel (i.e., not adjacent to the busy channel) and some are not-pure free channel (i.e., adjacent to busy channel); the reference value is either pure free or not –pure free channel); and selecting a channel from the at least one idle channel according to the at least one reference value (column 1, line 35 – column 2, line 47).

As to claim 14, Leonard discloses wherein detecting the status of each channel for identifying the in-use channel and the idle channel (column 1, lines 30-34).

As to claim 15, Leonard discloses wherein the reference value is determined by utilizing mathematical reference value calculation (column 1, line 35 – column 2, line 47).

As to claim 16, Leonard discloses wherein the reference value is determined by a weighted accumulation based on the interval between the idle channel corresponding to the reference value and the at least one in-use channel (column 1, line 35 – column 2, line 47).

As to claim 17, Leonard discloses wherein in the reference value determining step, the farther one of the at least one in-use channel to the reference value is, the idle channel corresponding to less is accumulated to the reference value (column 1, line 35 – column 2, line 47).

As to claim 18, Leonard discloses wherein in the selecting step, the idle channel corresponding to a reference value with the least weighted accumulation is selected (column 1, line 35 – column 2, line 47).

As to claim 19, Leonard discloses wherein in the reference value determining step, the farther one of the at least one in-use channel to the idle channel corresponding to the reference value is, the more is accumulated to the reference value (column 1, line 35 – column 2, line 47).

As to claim 20, Leonard discloses wherein in the selecting step, the idle channel corresponding to a reference value with the most weighted accumulation is selected (column 1, line 35 – column 2, line 47).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hamaoki (US 4.166.927) discloses apparatus and method for frequency channel selection in a radiotelephone system.

Yamada et al. (US 6,011,960) disclose telephone handset for operating in a plurality of wireless telephone system.

Lappetelainen et al. (US 6,834,045) disclose assembly and associated method, for facilitating frequency allocations in a radio communications system to attain statistical spreading of electromagnetic energy.

Kim et al. (US 7,206,586) disclose frequency assignment for multi-cell IEEE 802.11 wireless networks.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quochien B. Vuong whose telephone number is (571) 272-7902. The examiner can normally be reached on M-F 9:30-18:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on (571) 272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

QUOCHIEN B. VUONG
PRIMARY EXAMINER

Quochien B. Vuong
July 09, 2007.